

## ABSTRACT

The study was conducted at PT. Indocement Tbk, Palimanan West Village, District Gempol, Cirebon regency, West Java. Location of astronomical positioned  $108^{\circ}20'EL$  -  $108^{\circ}22'EL$  dan  $6^{\circ}39'SL$ -  $6^{\circ}41'SL$ . To reach the location use vehicle to be taken by road Cirebon - Bandung.

Based on sediment limestone mining method is applied to open pit (quarry), the direction of mining progress of the north-south, based on the direction of the excavated sediment mining, mining system used is a side hill type the driveway (access road) directly to the surface (front) mining.

Eviction activities performed on a relatively soft limestone by using a rake-thrust Caterpillar D8R bulldozer equipped with a ripper. This activity is intended to provide feedback on the wheel loader to facilitate the loading process. Loading and unloading equipment made Caterpillar 988F Wheel loader with a bucket capacity of  $6,1\text{ m}^3$  Munjung. For conveyance dumptruck load required for charging 3 times the capacity of  $23,6\text{ m}^3$  dump truck. Loading patterns using V-Shape loading pattern Loading, limestones and then transported to the location of crushing (crushing plant), using a Caterpillar 769C haul dumptruck with a capacity of  $23,6\text{ m}^3$ , with the direction of the back shed.

Target limestone mining at 175,000 tons / month, made with high levels of dimensions 15 m level (high level), 5 m (wide level),  $80^{\circ}$  (single level slope) obtained using the reserve block model at 1.774.254 tons. The design of the mine is divided into 10 months. Limestone mineable reserves in months I gained 179.220 tons of limestone reserves in II 178.327 tons, limestone reserves in III 176.092 tons, limestone reserves in IV 175.215 tons, limestone reserves in V 177.370 tons, limestone reserves in VI 178.471 tons, up limestones in VII 183.943 tons, limestone reserves in VIII 176.732 tons, limestone reserves in IX 178.473 tons, limestone reserves in X 175 411 tons.

The equipment used for the past 10 months as many as 1 unit load devices Caterpillar 988F Wheel loader unloading tool, 9 units dumptruck conveyance Caterpillar 769C as conveyance. Dimensions of road transport made with a width of 17 meters on the straight path, the path-dimensional depiction made is 19 m. Minimum width of road transport on the turn is 19 m. In the depiction of the dimensions made is 21 m radius track is 9 m, Cross slope is 0,76 mm / m and superelevasi is 0,84 m/m. To tilt the haul roads recommended by 10%.